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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/006,364	12/06/2001	Benn Bollay	10547-015-999	1655
20991	7590	09/26/2005	EXAMINER	
THE DIRECTV GROUP INC PATENT DOCKET ADMINISTRATION RE/R11/A109 P O BOX 956 EL SEGUNDO, CA 90245-0956			HAMANN, JORDAN J	
			ART UNIT	PAPER NUMBER
			2667	

DATE MAILED: 09/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/006,364

Applicant(s)

BOLLAY ET AL.

Examiner

Jordan Hamann

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/6/2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9 is/are allowed.
- 6) ☒ Claim(s) 1,2,8,10,11 and 17 is/are rejected.
- 7) ☒ Claim(s) 1,3-7,10,12-16,18 and 19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 December 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/6/2001</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

The information disclosure statement filed 12/6/2001 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Drawings

The drawings are objected to because Figure 4A Step 408 and Figure 4B Steps 446 and 448 refer to router 320, however the router in Figure 1 has the reference character 330. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the

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examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities: In the Brief Description of the Drawings, Figure 4 is described, however the drawings contain Figures 4A and 4B, and on page 4 lines 13-14 reading "allows a host to relocated anywhere" should read "to be relocated" or "to relocate".

Appropriate correction is required.

Claims 1 and 10 are objected to because of the following informalities: "a ARP" should read "an ARP". Appropriate correction is required.

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perlman (US 5,420,862) in view of Postel (RFC 925).

With respect to claim 1, Perlman discloses a method for communicating across divergent network segments in a network, the network including a first network segment and a second network segment, the first network segment including a switch having a

module (Figure 1 Element 100), the module executing said method comprising the steps of:

receiving a APR request packet from a first device (Figure 2 Element 1000), said ARP request packet including a request to locate a second device, wherein said first device is coupled to said first network segment (Figure 1 Elements 111A and 100) and said second device is coupled to said second network segment (Figure 1 Elements 112 and 113);

broadcasting said ARP request packet to network segments outside of said first network segment (Figure 2 Element 1026);

acquiring a reply from said second network segment (Figure 2 Element 1030);
and

transmitting said reply to said first device, such that future communication between said first device and said second device is enabled using a layer two communication protocol without any requirement for a layer three communication protocol (abstract).

Perlman does not disclose expressly the ARP tables being modified on said first device and said second device, however Postel discloses on page 1 of RFC 925 that the ARP cache of the first device is modified upon receipt of the ARP reply packet.

Perlman and Postel are analogous art because Perlman uses and Internet structure and Postel is a proposed standard for the Internet community.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to modify the ARP tables of the first and second devices of Perlman as described by Postel.

The motivation for doing so would have been so that future communication between the first device and second device would be immediately possible at layer two protocol level without resubmitting an ARP request.

Therefore, it would have been obvious to combine Postel with Perlman for the benefit of modifying the ARP tables on the first and second devices so future communication is possible without flooding the network with ARP requests to obtain the invention as specified in claim 1.

With respect to claim 10, the apparatus claims are interpreted and rejected for the same reason as set forth in the method claim 1.

Claims 2, 8, 11, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perlman (US 5,420,862) in view of Postel (RFC 925) as applied to claims 1 and 10 above, and further in view of Plummer (RFC 826).

With respect to claim 2, Perlman in view of Postel discloses the method of claim 1, see 103 rejection above, however does not disclose expressly wherein said ARP request packet includes a first MAC address associated with said first device, a first IP address associated with said first device, and a second IP address associated with a second device.

Plummer discloses on page 6 last paragraph and page 7 first paragraph an ARP request packet includes a first MAC address associated with said first device, a first IP

address associated with said first device, and a second IP address associated with a second device.

Perlman and Plummer are analogous are because Perlman uses ARP and Plummer discloses a proposed protocol for ARP.

At the time of the invention it would have been obvious to a person of ordinary skill in the art that an ARP request packet used by Perlman would have to contain the hardware and protocol address of the first device and the protocol address of the second device to be an ARP request packet by definition.

Therefore, it would have been obvious to combine Plummer with Perlman for the benefit of using a defined and well known process for address resolution to obtain the invention as specified in claim 2.

With respect to claim 11, the apparatus claims are interpreted and rejected for the same reason as set forth in the method claim 2.

With respect to claim 8, Perlman in view of Postel further in view of Plummer discloses the method of claim 1, see 103 rejection above, further comprising utilizing a single IP subnet for both said first network segment and said second network segment (Perlman column 2 lines 53-54).

With respect to claim 17, Perlman in view of Postel further in view of Plummer discloses the network of claim 11, see 103 rejection above, further comprising utilizing a single IP subnet for said first network segment and said second network segment (Perlman column 2 lines 53-54).

Allowable Subject Matter

Claim 9 is allowed.

Claims 3-7, 12-16, 18 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the prior art fails to teach converting the first MAC address and second MAC address to specialized multicast MAC addresses by the switch.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jordan Hamann whose telephone number is (571) 272-8564. The examiner can normally be reached on Monday-Friday 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (571) 272-3179. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JJH


CHI PHAM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800 9/23/05